CLAIMS

1. In a level meter employing the radar principle for measuring the fill-level of a medium in a container, with a signal generator for generating and transmitting an electromagnetic signal, an electrical conductor assembly for feeding the electromagnetic signal emanating from the signal generator into the container and returning the portion of the electromagnetic signal reflected by the medium in the container, and an electronic evaluation unit that serves to receive the portion of the electromagnetic signal reflected by the medium in the container and to determine the run time of said signal and thus the fill level of the medium in the container the improvement wherein, differentiated from the conductor assembly, a transducer is provided for the purpose of measuring another physical variable.

2. The level meter as in claim 1, wherein the transducer is provided for temperature, pressure or conductivity measurements.

3. The level meter as in claim 1 or 2, and further including a data transfer interface for the output of the additional physical variable detected by the transducer.

4. The level meter as in claim 1 or 2, wherein the transducer is mounted on the conductor assembly preferably in detachable fashion.

5. The level meter as in claim 1 or 2, wherein the conductor assembly is in the form of a single-conductor unit, preferably a conductor tube or conductor cable, and an insulated inner conductor leading to the transducer extends within the single-conductor unit.

6. The level meter as in claim 5, wherein the single-conductor unit is in the form of a feed line leading to the transducer, making possible a data and/or power transfer via said single-conductor unit from or to the transducer, and the electromagnetic signal emanating from the signal generator can be capacitively coupled into the single-conductor unit.

7. The level meter as in claim 5, wherein the inner conductor, insulated from and extending within the single-conductor unit, leads to the transducer and serves as a reference-potential connection and preferably as an instrument-ground connection.

8. The level meter as in claim 1 or 2, wherein the conductor assembly is configured as a twin-conductor unit with two conductors; preferably as a parallel or a coaxial line, one of the conductors is in the form of a feed line leading to the transducer so that by way of the conductor serving as the feed line to the transducer a data and/or power transfer is possible from or to the transducer, and that the electromagnetic signal generated by the signal generator can be coupled into the conductor serving as the feed line to the transducer.

9. The level meter as in claim 8, wherein, differentiated from the conductor serving as the feed line to the transducer, the conductor serves as the reference-potential connection and preferably as the instrument-ground connection.

10. The level meter as in claim 1 or 2, and further including a weight in the end region of the conductor assembly, said transducer being positioned on or in said weight.

11. The level meter as in claim 1 or 2, and further including an additional fill-level analyzer which the additional physical variable detected by the transducer can be fed, and wherein, on the basis of the additionally detected physical variable, an alternative fill-level determination can be made.

12. The level meter as in claim 11, and further including a test unit which can receive both the fill-level information determined by the radar-type measurement and the fill-level information determined by the alternative fill-level measurement based on the additional physical variable and by means of which the two fill-level values can be compared for testing the reliability of the radar-type fill-level measurement.